

### Rejections Under 35 U.S.C. § 103

#### A. Lim'438 in view of Akram

The Office has maintained the rejection of claims 1-18 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,074,438 ("Lim") in view of U.S. Patent No. 5,230,710 ("Akram"). New reasons have been provided for this rejection, as set forth on pages 2-4 of the outstanding Office Action. Applicant respectfully traverses the rejection for the reasons of record, as well as for the following additional reasons.

To establish a *prima facie* case of obviousness, there must be some suggestion or motivation, either in the reference itself or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. See M.P.E.P. § 2143. Furthermore, the suggestion or motivation must be found in the prior art, not in Applicant's disclosure. See *In re Vaeck*, 947 F.2d 488, 20 U.S.P.Q.2d 1438 (Fed. Cir. 1991). No such suggestion or motivation is present in the references cited here, as will be shown below.

Applicant's claimed invention requires at least one oxidation base chosen from the claimed formula (I) in combination with a coupler chosen from 1,3-bis(β-hydroxyethyl)amino-2-methylbenzene and an addition salt thereof with an acid. (Throughout these arguments, reference to either the claimed oxidation base of formula (I) or Applicant's claimed coupler also refers to the addition salt thereof with an acid, as is claimed.) Lim '438 in view of Akram does not teach or suggest Applicant's claimed combination.

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Rather, as discussed in the Response filed March 22, 2001, Lim'438 teaches that developers (1) and (2) may be combined with couplers (3) , (4), or (5). See Lim, col. 3, lines 15-25. In other words, Lim requires the presence of 4-amino-2-chlorophenol or 4-amino-2 chlorophenol in combination with a pyrazole or pyrazolin-5-one, as claimed. Not one of these developers or couplers falls within the scope of the oxidation bases or couplers of the instant claims. Lim '438 further teaches an extensive laundry list of optional additional "suitable" primary intermediates and/or couplers. See cols. 5-7. Most of these optional ingredients do not fall within the scope of Applicant's claimed at least one oxidation base or coupler and many, such as the pyrimidine derivatives and 2-hydroxyethyl-p-phenylenediamine, are actually excluded from Applicant's claims. See column 5, lines 30-31 and column 6, lines 46-65. Furthermore, not a single ingredient used in the Examples of Lim falls within the scope of the claimed formula (I) or coupler.

Accordingly, there is simply no motivation or suggestion provided by Lim '438 that would have directed the ordinary artisan to choose, from Lim'438's many optional ingredients, Applicant's specific oxidation bases and couplers as required by claim 1, while avoiding the compounds which are excluded from Applicant's claims.

In order to make up for the deficiencies of Lim '438, the Office has relied upon Akram. However, as discussed at pages 4-5 of the Response filed March 22, 2001, Akram adds to the list of possible couplers by reciting 2,6-diaminotoluenes in general, which may encompass many different couplers not claimed by Applicants. While Akram does list 1,3-bis( $\beta$ -hydroxyethylamino)-2-methylbenzene as a preferred compound, Akram fails to teach or suggest that this coupler should be combined with any of Applicant's claimed oxidation bases of formula (I). Instead, Akram lists six or more

developer compounds which may be used and which are different from the claimed oxidation base of formula (I). See Akram, column 9, lines 11-23. Therefore, taking Lim '438 and Akram in combination, there are literally thousands of possible combinations of oxidation bases and couplers, almost none of which fall within the scope of Applicant's claimed invention.

Thus, because of the large number of possible combinations, the odds of choosing Applicant's claimed combination from the teachings of Lim'438 and Akram are very low. Even if one of ordinary skill in the art were to select the claimed 1,3-bis(β-hydroxyethyl)amino-2-methylbenzene as a coupler, the claimed at least one oxidation base of Formula (I) must still be selected from the many primary intermediates taught by both Lim'438 and Akram. As already discussed, the primary intermediates required by Lim'438 (chlorosubstituted) do not fall within the scope of Applicant's claimed formula (I). The primary intermediates which do fall within the scope of Applicant's claims are merely taught as being optional, and are disclosed in extensive laundry lists of other primary intermediates which either do not fall within the scope of Applicant's claims or are specifically excluded by Applicant's claims. Thus, the Lim'438 reference does not provide the requisite suggestion to choose Applicant's claimed combination, and Akram does not remedy Lim'438's deficiencies.

The suggestion necessary to establish a *prima facie* case of obviousness must be clear and particular. See *In re Dembicza*k, 175 F.3d 994, 999, 50 U.S.P.Q.2d 1614 (Fed. Cir. 1999). Applicants submit that the combination of Lim'438 and Akram fails to provide clear and particular motivation to make all the necessary choices required to arrive at the claimed composition. At best, it may have been obvious to try every

possible combination of species falling with the scope of the Lim'438/Akram combination. However, as the Office is well aware, obvious to try is not the standard. See M.P.E.P. § 2145(X)(B). Therefore, as clear and particular motivation has not been provided, the rejection should be withdrawn.

B. LaGrange and/or Clausen in view of Zviak and Akram

The Office has rejected claims 1-18 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,703,266 ("LaGrange") and/or U.S. Patent No. 4,797,130 ("Clausen") in view of Zviak<sup>1</sup> and Akram, for the reasons set forth at pages 5-7 of the Office Action. Applicants respectfully traverse this rejection for at least the following reasons.

The LaGrange/Clausen/Zviak/Akram combination lacks clear and particular motivation directing the skilled artisan to choose Applicant's claimed composition of at least one oxidation base chosen from a substituted para-aminophenol corresponding to formula (I) and an acid addition salt thereof, and a coupler chosen from 1,3-bis(β-hydroxyethyl)amino-2-methylbenzene and an addition salt thereof with an acid.

LaGrange teaches "dye compositions for keratinous fibres . . . containing . . . at least one 3-substituted para-aminophenol with formula (I)." See column 1, lines 47-60. LaGrange further teaches that "compounds with formula (I) in dye compositions in accordance with the invention are generally used in the presence of a coupler selected from metadiphenols, metaaminophenols, and metaphenylenediamines with formula (III)." See column 4, lines 43-55. Applicant's claimed coupler does not fit within these

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<sup>1</sup> Zviak, C. and M. Dekker, The Science of Hair Care, New York (1986) pp. 263-286.

categories, and further, does not fit within LaGrange's extensive list of over 40 specific couplers taught at, e.g., column 5, lines 10-60.

Clausen teaches a composition comprising a 4-amino-2-amino-phenol of general formula (I) or its salt as a developer. See column 1, lines 48-63. A laundry list of over 20 couplers is taught, none of which is Applicant's claimed coupler. See column 2, lines 18-35.

In order to make up for the missing teachings of LaGrange and Clausen, the Office has applied Zviak and Akram. However, Zviak merely teaches additional laundry lists of possible couplers. See list of oxidation dyes on p. 264-265, some of which may be couplers, as well as the list of couplers on p. 266. Again, none of the couplers taught by Zviak is Applicant's claimed coupler. Akram teaches a relatively large number of couplers chosen from 2,6-diaminotoluene derivatives of formula I and its salts. See column 2, lines 28-51. Akram's Formula I includes a wide variety of possible couplers. See, e.g., column 4, Table I.

Thus, the LaGrange, Clausen, Zviak, and Akram combination teaches a plethora of couplers from which the skilled artisan must choose. Because of the large number of couplers taught, however, the odds of choosing Applicant's claimed couplers are small. Furthermore, no clear suggestion is provided to select the claimed couplers in combination with Applicant's at least one oxidation base chosen from formula (I).

The Office has argued that Zviak teaches 2, 6-diaminotoluene is a conventional coupler for use in oxidative hair dying compositions along with developers and oxidants. See Office Action, p. 6. The Office has further argued that it would have been obvious to select the 2,6-bis(hydroxyethylamino)toluene for use as a coupler in the compositions

of LaGrange or Clausen because while Zviak teaches that 2,6 diaminotoluene is a conventional coupler in oxidative dyeing compositions, Akram teaches that 2,6 bis(hydroxyethylamino)toluene is preferred and results in various improved dying properties such as intense colors and resistance to various agents. See Office Action, p. 6.

Following the apparent reasoning of the Office, one of ordinary skill in the art would have to make several unlikely choices to arrive at Applicant's claimed composition. First, the skilled artisan would have to ignore the couplers taught by LaGrange and Clausen and, without any specific suggestion to do so, replace them with 2,6-diaminotoluene, one of many on a long list of couplers taught by Zviak. Then the skilled artisan would have to decide to replace 2,6-diaminotoluene with one of the many couplers taught by Akram, and particularly 2,6 bis(hydroxyethylamino)toluene. At best there may be motivation to replace the 2,6 diaminotoluene of Zviak with Akram's coupler. But, since 2,6 diaminotoluene is not listed in Lagrange or Clausen, there is no motivation for going further and replacing the couplers of Lagrange and/or Clausen.

Even if, for the sake of argument, 2,6 bis(hydroxyethylamino)toluene were selected, the skilled artisan must still select the claimed at least one oxidation base. Applicants submit that such an unlikely combination of choices does not provide adequate motivation to support a *prima facie* case of obviousness.

As discussed above, the motivation necessary to establish a *prima facie* case of obviousness must be clear and particular. See *In re Dembiczak*, 175 F.3d 994, 999, 50 U.S.P.Q.2d 1614 (Fed. Cir. 1999). Applicants submit that the LaGrange/Clausen/Zviak/Akram combination fails to provide clear and particular

motivation to make all the necessary choices required to arrive at the claimed composition. The Office's argument implies it would have been obvious to try every possible combination of species falling with the scope of the LaGrange/Clausen/Zviak/Akram combination. However, "obvious to try" is not the standard for determining obviousness. See M.P.E.P. § 2145(X)(B). Therefore, because the requisite motivation to establish a *prima facie* case of obviousness has not been provided, the rejection should be withdrawn.

**Provisional Obvious Double Patenting**

For the reasons discussed in the Amendment and Response dated October 19, 2000, Applicants respectfully request that the obvious-type double patenting rejections be held in abeyance until allowable subject matter is indicated in the instant application. Until such time, Applicants reserve the right to traverse the rejection or file a terminal disclaimer.

**CONCLUSION**

In view of the foregoing remarks, Applicants respectfully request reconsideration and reexamination of this application and the timely allowance of the pending claims.

Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

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